

# RHIC and Injector Status

Time meeting 5/16/2017

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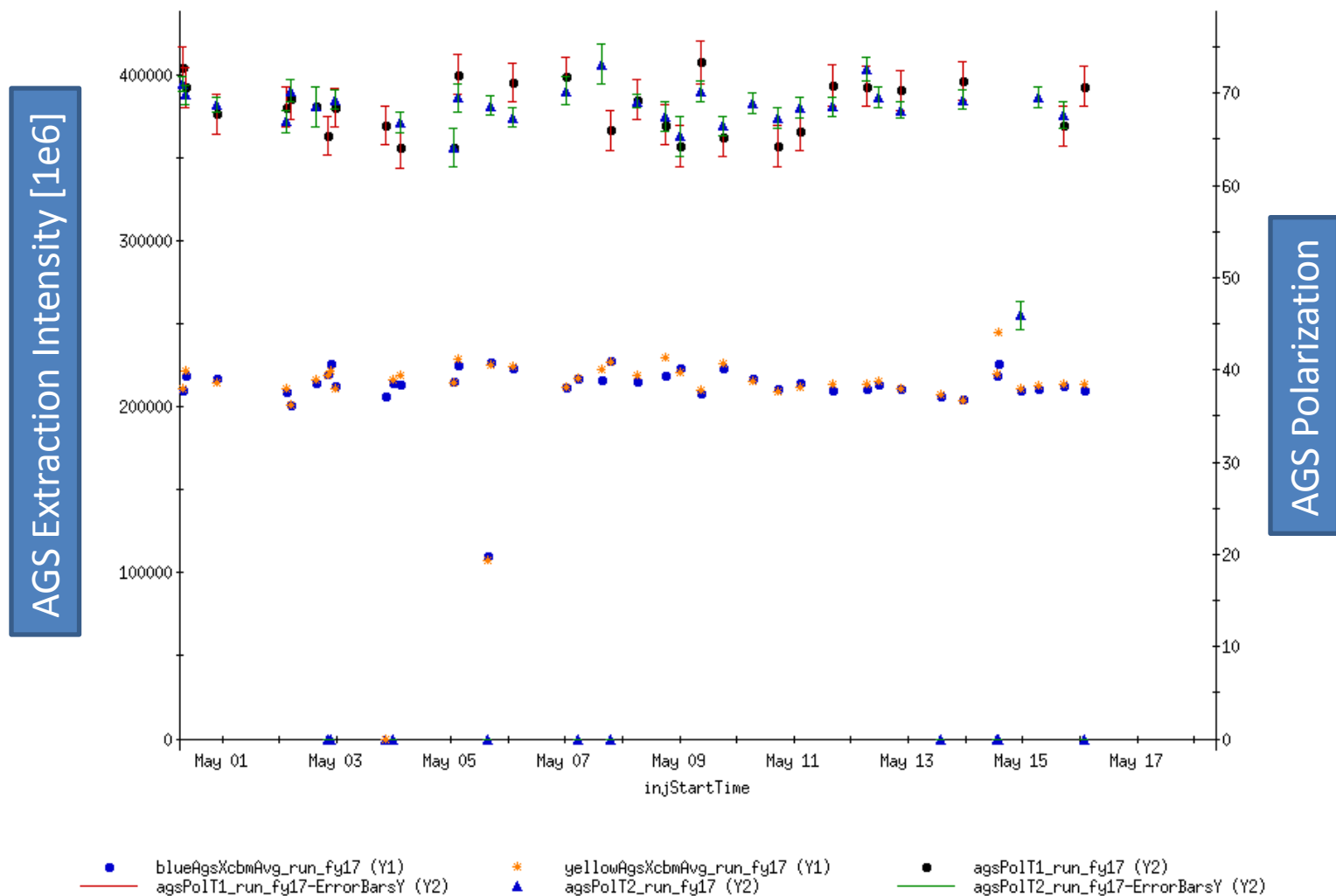


# Injectors Status

- AGS polarized proton operation has been good, studies focusing on gathering data necessary for post-run analysis
  - Measuring chroms in the 'no snake' AGS with varying sextupole current (addresses the 'missing current' mystery)
  - Measuring beta functions at IPMs for emittance analysis
  - During Au running, test proton bunch lengthening with  $h=8$  (compatible with both Au merging and proton lengthening).

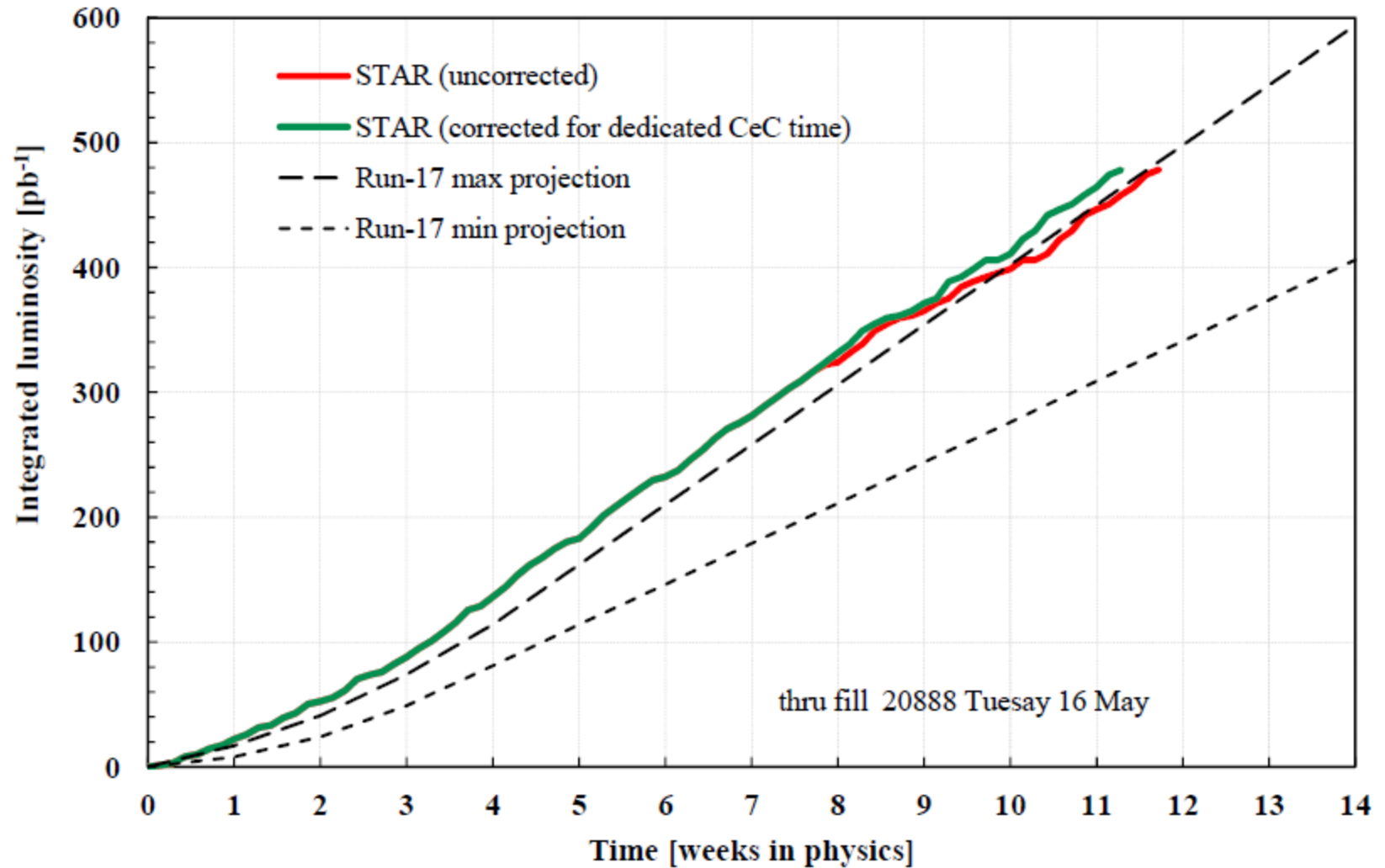
# AGS Intensity and Polarization

injStats WHERE runName = 'run\_fy17'

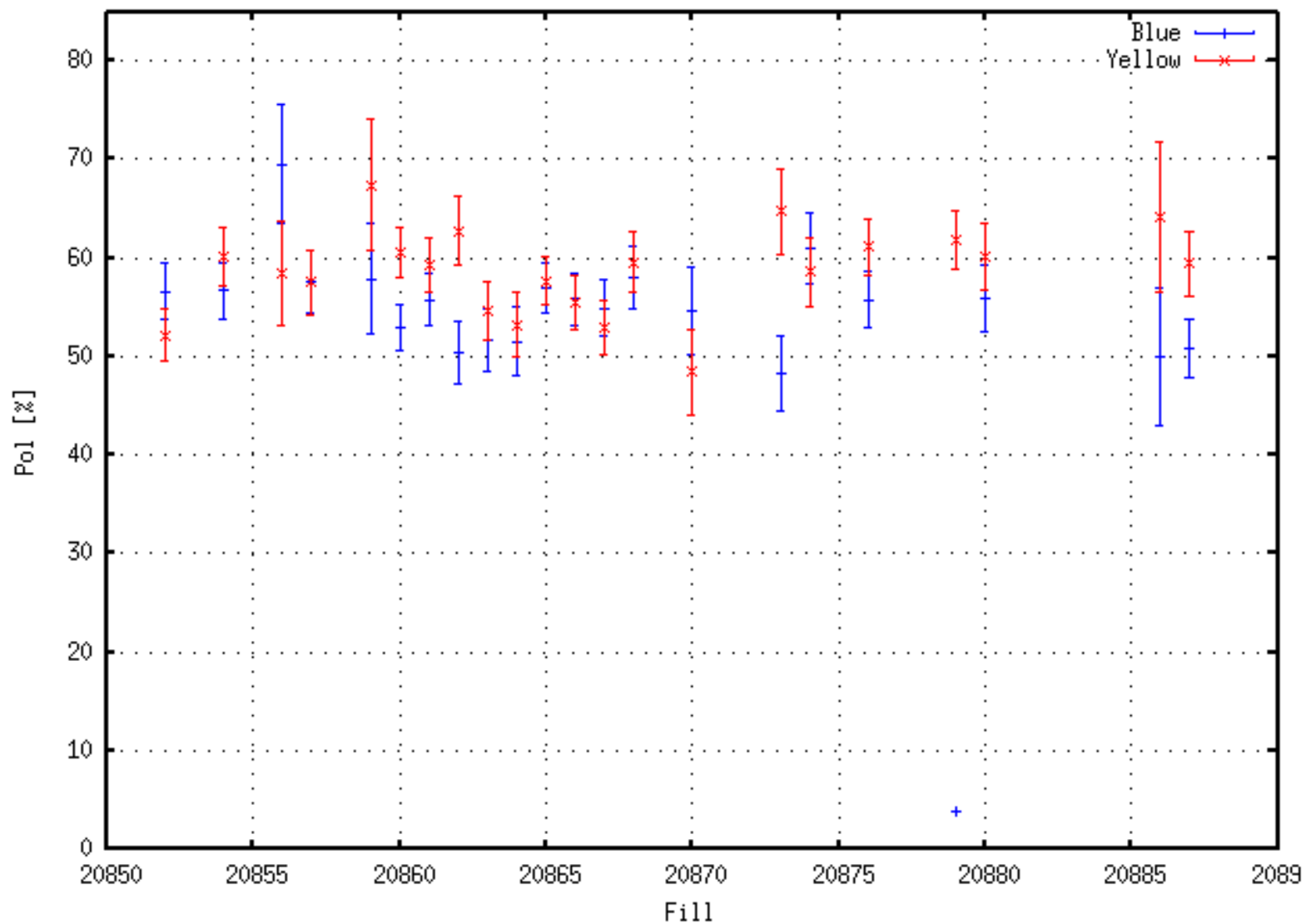


# RHIC Integrated Luminosity

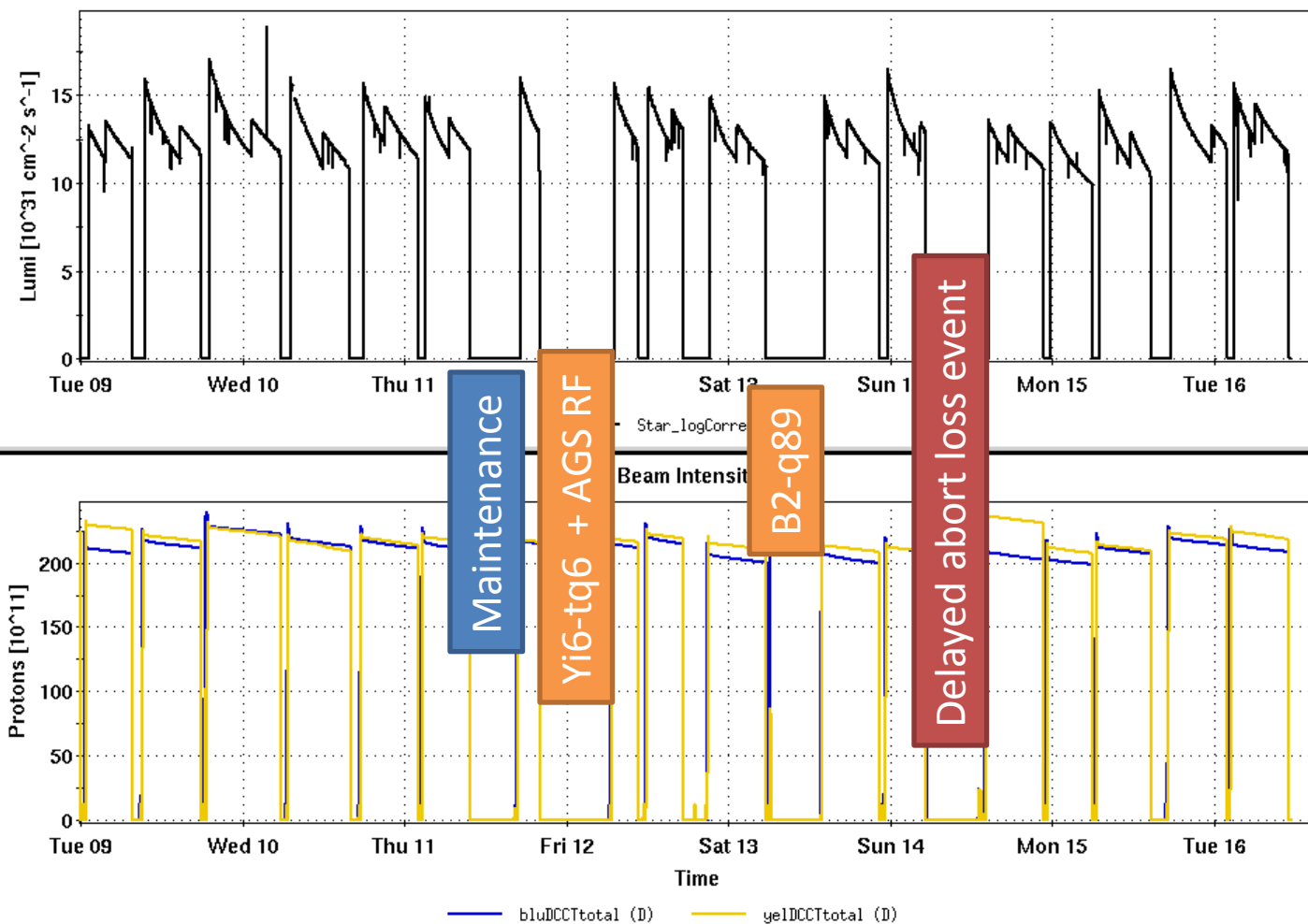
**RHIC Run-17 delivered luminosity,  $p\uparrow+p\uparrow$  at  $\sqrt{s} = 510$  GeV**



# RHIC Polarization (H-Jet)



# RHIC Performance



# Delayed abort loss event

- Delayed abort active in yellow since May 6
  - Since then many non-QLI beam aborts (with delays) are clean
- Sunday May 16 was the first yellow QLI with delayed abort with yellow beam still circulating
- All the yellow beam is lost in the 30 ms between the permit pull and the kicker trigger (i.e. during the 'delay' in 'delayed abort')
  - *The abort system itself functioned as intended*
- Tens of magnets quench, including YI7-D6 (the dipole with the damaged diode)
- QLI originated with the yellow main quad p.s. DCCT (unusual kind of QLI), but it remains possible that this is the beam reaction to any QLI
- As a result, delayed abort is not in use now, which means prefires remain a possibility.